

A. AMENDMENTS TO CLAIMS

Please cancel Claims 10, 12, 20, 22 and 30-49, and add new Claims 50-77.

1 - 49. (CANCELED)

50. (NEW) A method for communicating data from a source to a destination over a communications link, the method comprising:

receiving and storing a synchronous data stream into a first data buffer, wherein the synchronous data stream has a first average data bit rate;

receiving and storing an asynchronous data stream into a second data buffer, wherein the asynchronous data stream has a second average data bit rate;

transmitting, over the communications link during a plurality of time periods comprising a first subplurality of time periods and a second subplurality of time periods, an output data stream that includes a first set of one or more data bits that are transmitted onto the communications link from the first buffer during the first subplurality of time periods and a second set of one or more data bits that are transmitted onto the communications link from the second data buffer during the second subplurality of time periods; and

wherein if the second average data bit rate is less than the first average data bit rate, then during the second subplurality of time periods, the values of all of the data bits in the second set of one or more data bits are the same and represent the value of the asynchronous data stream.

- 1 51. (NEW) The method as recited in Claim 50, wherein the output data stream has a data
2 rate that is twice the integral part of a ratio of the first average data bit rate to the
3 second average data bit rate.
- 1 52. (NEW) The method as recited in Claim 50, wherein a number of time periods in the
2 first subplurality of time periods equals a number of time periods in the second
3 subplurality of time periods.
- 1 53. (NEW) The method as recited in Claim 50, wherein the first subplurality of time
2 periods includes every other time period in the plurality of time periods.
- 3 54. (NEW) The method as recited in Claim 53, wherein the first subplurality of time
4 periods includes the even time periods in the plurality of time periods and the second
5 subplurality of time periods includes the odd time periods in the plurality of time
6 periods.
- 1 55. (NEW) The method as recited in Claim 50, further comprising selecting the number of
2 time periods in both the plurality of time periods and the second subplurality of time
3 periods to compensate for an accumulated skew attributable to a ratio of the first
4 average data bit rate to the second average data bit rate being a non-integral ratio.
- 1 56. (NEW) The method as recited in Claim 50, further comprising:
2 selecting the number of time periods in the plurality of time periods to be the sum of
3 one and twice the integral value of a ratio of the first average data bit rate to the
4 second average data bit rate; and

5 selecting the number of time periods in the second subplurality of time periods to be the
6 sum of one and the integral value of the ratio of the first average data bit rate to
7 the second average data bit rate.

1 57. (NEW) A machine-readable medium for communicating data from a source to a
2 destination over a communications link, the machine-readable medium carrying
3 sequences of instructions which, when executed by one or more processors, cause:
4 receiving and storing a synchronous data stream into a first data buffer, wherein the
5 synchronous data stream has a first average data bit rate;
6 receiving and storing an asynchronous data stream into a second data buffer, wherein the
7 asynchronous data stream has a second average data bit rate;
8 transmitting, over the communications link during a plurality of time periods comprising
9 a first subplurality of time periods and a second subplurality of time periods, an
10 output data stream that includes a first set of one or more data bits that are
11 transmitted onto the communications link from the first buffer during the first
12 subplurality of time periods and a second set of one or more data bits that are
13 transmitted onto the communications link from the second data buffer during the
14 second subplurality of time periods; and
15 wherein if the second average data bit rate is less than the first average data bit rate, then
16 during the second subplurality of time periods, the values of all of the data bits in
17 the second set of one or more data bits are the same and represent the value of the
18 asynchronous data stream.

- 1 58. (NEW) The machine-readable medium as recited in Claim 57, wherein the output data
2 stream has a data rate that is twice the integral part of a ratio of the first average data bit
3 rate to the second average data bit rate.
- 1 59. (NEW) The machine-readable medium as recited in Claim 57, wherein a number of
2 time periods in the first subplurality of time periods equals a number of time periods in
3 the second subplurality of time periods.
- 1 60. (NEW) The machine-readable medium as recited in Claim 57, wherein the first
2 subplurality of time periods includes every other time period in the plurality of time
3 periods.
- 1 61. (NEW) The machine-readable medium as recited in Claim 60, wherein the first
2 subplurality of time periods includes the even time periods in the plurality of time
3 periods and the second subplurality of time periods includes the odd time periods in the
4 plurality of time periods.
- 1 62. (NEW) The machine-readable medium as recited in Claim 57, further comprising
2 additional instructions which, when processed by the one or more processors, causes
3 selecting the number of time periods in both the plurality of time periods and the
4 second subplurality of time periods to compensate for an accumulated skew attributable
5 to a ratio of the first average data bit rate to the second average data bit rate being a
6 non-integral ratio.
- 1 63. (NEW) The machine-readable medium as recited in Claim 57, further comprising
2 additional instructions which, when processed by the one or more processors, causes:

3 selecting the number of time periods in the plurality of time periods to be the sum of
4 one and twice the integral value of a ratio of the first average data bit rate to the
5 second average data bit rate; and
6 selecting the number of time periods in the second subplurality of time periods to be the
7 sum of one and the integral value of the ratio of the first average data bit rate to
8 the second average data bit rate.

1 64. (NEW) An apparatus for communicating data from a source to a destination over a
2 communications link, the apparatus comprising:
3 means for receiving and storing a synchronous data stream into a first data buffer,
4 wherein the synchronous data stream has a first average data bit rate;
5 means for receiving and storing an asynchronous data stream into a second data buffer,
6 wherein the asynchronous data stream has a second average data bit rate;
7 means for transmitting, over the communications link during a plurality of time periods
8 comprising a first subplurality of time periods and a second subplurality of time
9 periods, an output data stream that includes a first set of one or more data bits that
10 are transmitted onto the communications link from the first buffer during the first
11 subplurality of time periods and a second set of one or more data bits that are
12 transmitted onto the communications link from the second data buffer during the
13 second subplurality of time periods; and
14 wherein if the second average data bit rate is less than the first average data bit rate, then
15 during the second subplurality of time periods, the values of all of the data bits in
16 the second set of one or more data bits are the same and represent the value of the
17 asynchronous data stream.

1 65. (NEW) The apparatus as recited in Claim 64, wherein the output data stream has a data
2 rate that is twice the integral part of a ratio of the first average data bit rate to the
3 second average data bit rate.

1 66. (NEW) The apparatus as recited in Claim 64, wherein a number of time periods in the
2 first subplurality of time periods equals a number of time periods in the second
3 subplurality of time periods.

1 67. (NEW) The apparatus as recited in Claim 64, wherein the first subplurality of time
2 periods includes every other time period in the plurality of time periods.

1 68. (NEW) The apparatus as recited in Claim 67, wherein the first subplurality of time
2 periods includes the even time periods in the plurality of time periods and the second
3 subplurality of time periods includes the odd time periods in the plurality of time
4 periods.

1 69. (NEW) The apparatus as recited in Claim 64, further comprising means for selecting the
2 number of time periods in both the plurality of time periods and the second subplurality
3 of time periods to compensate for an accumulated skew attributable to a ratio of the
4 first average data bit rate to the second average data bit rate being a non-integral ratio.

1 70. (NEW) The apparatus as recited in Claim 64, further comprising means for:
2 selecting the number of time periods in the plurality of time periods to be the sum of
3 one and twice the integral value of a ratio of the first average data bit rate to the
4 second average data bit rate; and

5 selecting the number of time periods in the second subplurality of time periods to be the
6 sum of one and the integral value of the ratio of the first average data bit rate to
7 the second average data bit rate.

1 71. (NEW) An apparatus for communicating data from a source to a destination over a
2 communications link, the apparatus comprising a memory storing instructions which,
3 when executed by one or more processors, cause:
4 receiving and storing a synchronous data stream into a first data buffer, wherein the
5 synchronous data stream has a first average data bit rate;
6 receiving and storing an asynchronous data stream into a second data buffer, wherein the
7 asynchronous data stream has a second average data bit rate;
8 transmitting, over the communications link during a plurality of time periods comprising
9 a first subplurality of time periods and a second subplurality of time periods, an
10 output data stream that includes a first set of one or more data bits that are
11 transmitted onto the communications link from the first buffer during the first
12 subplurality of time periods and a second set of one or more data bits that are
13 transmitted onto the communications link from the second data buffer during the
14 second subplurality of time periods; and
15 wherein if the second average data bit rate is less than the first average data bit rate, then
16 during the second subplurality of time periods, the values of all of the data bits in
17 the second set of one or more data bits are the same and represent the value of the
18 asynchronous data stream.

- 1 72. (NEW) The apparatus as recited in Claim 71, wherein the output data stream has a data
2 rate that is twice the integral part of a ratio of the first average data bit rate to the
3 second average data bit rate.
- 1 73. (NEW) The apparatus as recited in Claim 71, wherein a number of time periods in the
2 first subplurality of time periods equals a number of time periods in the second
3 subplurality of time periods.
- 1 74. (NEW) The apparatus as recited in Claim 71, wherein the first subplurality of time
2 periods includes every other time period in the plurality of time periods.
- 1 75. (NEW) The apparatus as recited in Claim 74, wherein the first subplurality of time
2 periods includes the even time periods in the plurality of time periods and the second
3 subplurality of time periods includes the odd time periods in the plurality of time
4 periods.
- 1 76. (NEW) The apparatus as recited in Claim 71, wherein the memory includes additional
2 instructions which, when processed by the one or more processors, causes selecting the
3 number of time periods in both the plurality of time periods and the second subplurality
4 of time periods to compensate for an accumulated skew attributable to a ratio of the
5 first average data bit rate to the second average data bit rate being a non-integral ratio.
- 1 77. (NEW) The apparatus as recited in Claim 71, wherein the memory includes additional
2 instructions which, when processed by the one or more processors, causes:

3 selecting the number of time periods in the plurality of time periods to be the sum of
4 one and twice the integral value of a ratio of the first average data bit rate to the
5 second average data bit rate; and
6 selecting the number of time periods in the second subplurality of time periods to be the
7 sum of one and the integral value of the ratio of the first average data bit rate to
8 the second average data bit rate.